

EXHIBIT A

***Declaration of Keith N. Cole in Support of the Reply in Support of the Reorganized Debtor's
Claim Objection Requesting Partial Allowance and Partial Disallowance of MDEQ
Prepetition Claim (Substantive Objection) (the "Second Cole Declaration")***

various aspects of the mining operation. In 1970s the State granted to Grace a permit authorizing its mining activities (including potential disturbance of up to 1200 acres) and construction of the Kootenai Development Impoundment Dam began. [**Exhibit 1**, 1972 Development Permit; **Exhibit 2**, 1972 Operating Permit.] The Reclamation Plan submitted to and approved by Montana in connection with the 1972 permit says that:

1. Currently the land is in use as forest land, by industry and very limited recreation and wild life usage. 2. The nearby land is used as forest land. 3. The land is naturally suited for forest uses but cover does not support much wildlife nor does topography offer recreational advantages.

[**Exhibit 3**, 1971 Reclamation Plan]. That reclamation plan and later plans that amended it documented site conditions, the placement of mining materials, and how the mining site would be stabilized, vegetated and generally prepared for closure after cessation of mining activity. State regulation evolved over time, for instance with notification in 1986 that some requirements would be expanded as regulatory documents were amended. [**Exhibit 4**, 1986 letter]. Through this State regulation, State agencies, including MDEQ, knew or had reason to know of the historical mining activities at the Libby Mine Site, including certain potential environmental impacts of those activities.

3. The mining operations ceased in 1990. In 1993, in recognition of Grace's outstanding achievement in mining reclamation, the Montana Mining Association presented Grace with an "In Pursuit of Excellence" award. [**Exhibit 5**, October 1993, "In Pursuit of Excellence, W. R. Grace Closes Vermiculite Mine With Class," Gary Langley article in *The pick and shovel*, Montana Mining Association.] However, the relevant state agencies coordinated at the time to continue their respective ongoing regulatory roles. [**Exhibit 6**, July 14, 1992 Montana Internal Memorandum re W.R. Grace Closure Plan Environmental Assessment]. In connection with the mine's closure and reclamation, in the 1990s a multi-disciplinary

environmental assessment was conducted with the cooperation of multiple state agencies, and the state continued to provide regulatory oversight governing mine reclamation, impoundment closure, and continued dam permitting activities. *Id.* From approximately 1991 through 1994, the environmental investigations included repeated collection and analysis of surface water for asbestos and other constituents. [**Exhibit 7** and **Exhibit 8**, (two examples of water quality data reports required by and provided to the State in the early 1990s)].

4. Montana officials also inspected the mining site area and made observations about environmental impacts and the sufficiency of reclamation. [**Exhibit 9**, August 31, 1994 Bond Release Finding, Montana Department of State Lands; **Exhibit 10**, September 13, 1994 Memorandum to File From P. Plantenberg, Reclamation Specialist Re Recommendation for Partial Bond Release at WR Grace]. Montana inspections assessed topics such as materials handling, water controls, air quality, and the condition of the facilities. [**Exhibit 11**, Inspection report of June 10, 1999].

5. Montana involvement has continued through the years. As a recent regulatory activity, on April 3, 2019 Montana issued a permit to operate Kootenai Development Impoundment Dam. [**Exhibit 12**, 2019 KDID Operation Permit].

6. In addition to development of site information under Montana regulatory programs, during work at the Site pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA” or “Superfund”), 42 U.S.C. §§ 9601-9675, the U.S. Environmental Protection Agency (“EPA”) and Reorganized Debtor have developed a larger amount of factual background and site characterization, data, and study results concerning the Libby Site in general and Operable Unit 3 (“OU3”) in particular, as discussed below. [**Exhibit 13**, August 22, 2019 Libby Figure 1 OU3 And KDC Boundaries].

7. Reorganized Debtor began a Remedial Investigation (“RI”) of OU3 in 2007 pursuant to the 2007 OU3 Administrative Order described in my initial Declaration.³ In connection with this RI, all data and studies have been provided and otherwise made available to MDEQ. In addition, MDEQ has provided input or written comments on the plans for collecting information, the interpretation of such information, and reports and assessments of the data, information, and studies conducted on the site. MDEQ and its consultants have routinely participated in a range of technical meetings among teams from EPA, Grace, and other federal and state stakeholders (including each of their respective consultants), recently typically multiple times a week depending upon tasks and scheduling. Furthermore, MDEQ, EPA, Grace, and other federal and state stakeholders have participated in large group meetings to discuss the central and over-arching issues for OU3 on a semi-annual or more frequent basis.

8. The RI occurred in phases and included the collection and analysis of more than 3,300 field samples for asbestos and more than 500 field samples for non-asbestos constituents in various environmental media, including but not limited to surface water, groundwater, sediment, soil, mine waste, duff materials (which is a layer of leaves, bark and other vegetative debris on the forest floor), tree bark, air, fish, and mammals. As discussed in Paragraphs 16-21, below, the RI also included risk assessments to evaluate the potential risks to human health and the environment associated with releases of asbestos and non-asbestos constituents in OU3.

9. After approximately nine years of study, the OU3 RI culminated in a Final Remedial Investigation Report (“RI Report”) submitted to EPA in November 2016. (An initial draft had been submitted in September 2015.) The RI Report described the physical

³ Declaration of Keith N. Cole in Support of the Reorganized Debtor's Request for Partial Allowance and Partial Disallowance of the Claim by the Montana Dept. of Env. Quality (“MDEQ”) for Environmental Remediation at Operable Unit 3 of the Libby Asbestos Superfund Site (“First Cole Declaration”) Docket no. 33099-4.

characteristics of the area, summarized past investigations, described the nature and extent of releases of hazardous substances at OU3, described the processes affecting the fate and transport of such substances, and summarized the conclusions of the risk assessments. Section 9 of the RI Report summarizes its conclusions. **[Exhibit 14]**.

10. Section 1.3.3 of the RI Report summarized EPA sampling in OU3 prior to commencement of the RI in 2007 (some of which had occurred by 2001). These investigations included: soil samples collected along various roads, rights of way, and logging areas; surface water samples and three sediment samples from Rainy Creek and the tailings impoundment; three tree bark samples; personal air monitoring samples (including activity-based sampling to measure asbestos concentrations in air during disturbances of material containing asbestos) and stationary air monitoring samples; and aquatic community data at a station in the Kootenai River about a mile downstream of the confluence with Rainy Creek.

11. Section 4 of the RI Report summarized the RI data collection activities performed between September 2007 and September 2015 under EPA oversight. These data included 2,564 environmental samples that were analyzed for asbestos, including 133 soil samples, 95 forest soil samples, 156 duff (forest floor detritus) samples, 161 tree bark samples, 12 tree core samples, 711 surface water samples, 222 sediment samples, over 800 air samples (including activity-based sampling to measure asbestos concentrations in air during disturbances of material containing asbestos), 34 groundwater samples, and 38 mine waste samples. These data also included 488 environmental samples that were analyzed for non-asbestos constituents, including 149 soil samples, 12 forest soil samples, 110 surface water samples, 156 sediment samples, 23 groundwater samples, and 38 mine waste samples.

12. In addition to the substantial sampling of environmental media, toxicity testing

was performed to evaluate the response of fish, aquatic invertebrates, and amphibians to OU3 environmental media, and surveys of fish and benthic macroinvertebrate communities were performed to evaluate organism diversity and density. Habitat studies were also performed to understand the various habitat factors that affect organism diversity and density.

13. In addition to the toxicity testing, samples were collected of amphibian tissues and the tissues of multiple small mammal species to evaluate organism health and compare with reference locations.

14. In support of the human health risk assessment, discussed below, samples were also taken of large game and fish in OU3 that may be sought by hunters and anglers.

15. Section 7 of the RI Report summarized the results of the risk assessments that had been performed using the data collected during the multiple years of the RI, focusing on the results specific to OU3. Copies of the full risk assessments were appended to the RI Report.

16. EPA issued the Final Human Health Risk Assessment for Non-Asbestos Contaminants in OU3 in 2013 (“OU3 Non-Asbestos HHRA”). (The remainder of the Libby Site was not evaluated for non-asbestos constituents.) It estimated potential human health risks from exposures to non-asbestos contaminants at OU3 under current and reasonably anticipated future uses. The OU3 Non-Asbestos HHRA concluded that exposure to non-asbestos contaminants in OU3 is below a level of concern. [**Exhibit 15**, at pp. ES-4 to ES-5 and p. 9-1].

17. EPA also issued the Final Baseline Ecological Risk Assessment for Non-Asbestos Contaminants in OU3 in 2013 (**Exhibit 16** “OU3 Non-Asbestos BERA” Excerpt). It assessed the likelihood, nature, and extent of any adverse effects on ecological receptors in OU3 resulting from exposure to non-asbestos constituents released to the environment as a result of past mining, milling, and processing activities at OU3. Based on a weight of evidence evaluation, the

OU3 Non-Asbestos BERA concluded that risks are either not expected or likely to be minimal from non-asbestos contaminants to fish, aquatic invertebrates, and wildlife in OU3 (except for plants and terrestrial invertebrates in the mined area, for which the assessment neither excluded the possibility nor found evidence of risk). [**Exhibit 16**, at pp. ES-3, ES-4 and pp. 10-1 to 10-3].

18. EPA issued the Final Site-Wide Baseline Ecological Risk Assessment for Asbestos in December 2014 (**Exhibit 17** “Site-Wide Asbestos BERA” Excerpt). It described the likelihood, nature, and extent of adverse effects on ecological receptors in all Libby Site OUs, including OU3, resulting from exposure to asbestos present in the environment. The Site-Wide Asbestos BERA concluded that the “[s]tudies of fish, benthic invertebrates, and amphibians exposed to [asbestos] in surface water and/or sediment revealed no evidence of ecologically significant effects that were attributable to [Libby amphibole asbestos]. Likewise, in the terrestrial environment, a study of mice exposed to [asbestos] in soil and duff in an area of high [asbestos] contamination revealed no evidence of effects attributable to [asbestos]. Three studies indicate that ecological receptors are unlikely to be adversely impacted by [asbestos] released to the aquatic or terrestrial environments by previous vermiculite mining and milling activities.” [**Exhibit 17**, at p. ES-11.]

19. The Final Site-Wide Human Health Risk Assessment for asbestos was issued in November 2015 (**Exhibit 18** “Site-Wide Asbestos HHRA” Excerpt). It estimated potential human health risks from exposures to asbestos at the Libby Site through, in part, defining, conducting and collecting data as testers performed specific assumed activities that a resident or worker might perform (known as activity-based sampling). In establishing the activities to evaluate, EPA created scenarios that it refers to as “reasonable maximum exposures.” For instance, for a hiker along Rainy Creek (where there are no developed hiking trails), EPA

assumed as a “reasonable maximum exposure” that a person hikes about once per week from May through September (20 times), for 3.6 hours each time, and repeats this activity in the same location and frequency for 52 years. EPA also established “central tendency exposures,” under which the same theoretical hiker would walk that same route for the same amount of time (3.6 hours) but at half of the frequency (10 times per year for 22 years). [Exhibit 18, at Table 6-15]. The duration was based on data reflecting how long persons reside in Libby, not on data showing actual hiker patterns.

20. As another example of EPA’s study design, for a trespasser “rockhound” scenario studied in 2015, EPA did not assume a one-time or fleeting trespass. Instead, EPA assumed that the trespass would occur for 6 hours a day, three times each year for 52 years (as a reasonable maximum exposure) and about half of that for a central tendency exposure. These scenarios were tested at the Site and according to scripts that the investigators developed. For instance, for the rockhound scenario, “individuals traversed *across the disturbed area of the former mine* looking for interesting rock and mineral specimens by examining outcrops, rock faces, and waste rock piles and collecting rock specimens in a bag.” [Exhibit 18, at p. 6-23, Section 6.6.2.5. (emphasis added)]. EPA described that three data collection events were performed, and for each one it had two Grace contractors performing the scripted trespasser activity-based sampling activities. *Id.*

21. Under assumptions and protocols specifically developed for each scenario, EPA’s Site-Wide Asbestos HHRA evaluated more than 150 different exposure scenarios to assess the risk of exposure to asbestos. EPA determined that following exposure scenarios and findings were most relevant to OU3:

- a. Exposures to outdoor ambient air do not pose a significant human health risk. [Exhibit 14, at p. 217].

- b. The risk of ingesting asbestos in fish and game tissues from OU3 is of low concern. *Id.*
- c. There is no significant risk associated with recreational activities such as hiking through the OU3 forest or along lower Rainy Creek between Highway 37 and the Grace property. [**Exhibit 18**, at Table 6-17.] This was determined based upon the above-described assumption of weekly exposure May through September, for 52 years.
- d. There is no significant risk associated with recreational activities such as hiking or fishing along the Kootenai River that may disturb asbestos in Kootenai River sediments. [**Exhibit 14**, at p. 216, and **Exhibit 18**, at Tables 6-14 through 6-17.]
- e. Of the 150 scenarios in the HHRA, no scenario presented a risk under the central tendency calculations. Under the reasonable maximum exposures, four scenarios may present a risk, three of which are worker exposure scenarios [**Exhibit 14**, at pp. 199 and 218]:
 - i. certain commercial logging activities such as skidding (dragging logs across the ground) or site restoration (using a bulldozer to restore an area after a tree is felled) *Id.* [**Exhibit 18**, Table 8-5];
 - ii. firefighters performing dry (no water) mop-up activities after an understory burn under which “two individuals entered the burn area to perform mop-up activities using hand tools (e.g., a Pulaski axe to mix, stir, and dig up the mineral soil)” (for 2 hours per day, 7 days per year, for 25 years) [**Exhibit 18**, at p. 8-6, Section 8.1.7.2 and Table 8-6];
 - iii. forest workers building slash piles (for 10 days per year, repeated for 10 years). [**Exhibit 18**, at Table 8-6]; and
 - iv. One recreational “trespasser rock hound” exposure in the disturbed area of the Mine in OU3 (based on the reasonable maximum exposure that assumed repeated visits three times per year for 52 years. [**Exhibit 18**, at Table 6-17].

EPA issued a Final Addendum: Site-Wide Human Health Risk Assessment in June 2018

[**Exhibit 19**, Site-Wide Asbestos HHRA Addendum Excerpt]. This addendum concluded that exposure to woodstove ash from wood obtained from OU3 did not present an unacceptable human health risk and made other clarifications. *Id.*

22. To the best of my knowledge, the Former Mine Area is largely the private property of Kootenai Development Company, a wholly-owned subsidiary of Grace, and is posted

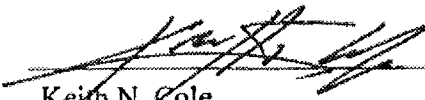
against trespassing. The area of OU3 surrounding the Former Mine Area is land managed by the United States Forest Service. Rainy Creek is hard to get to, its banks are overgrown with brush, and it would be difficult to walk in or along. The creek passes through a number of under-road culverts, and is generally bounded by private property.

23. In the early 2000s, EPA closed access to Rainy Creek Road between Highway 37 and the Grace property by posting a sign and installing a gate that currently blocks vehicle entry. This closure was before the EPA human health risk assessments showed that recreational access did not present a human health risk. The physical blockage and sign are present only at the road. I am not aware of any other signage or governmental installed barrier to access related to the presence of asbestos. There are certain other gates to prevent general trespassers.

24. In addition to summarizing the risk assessment results, the RI Report noted that the drinking water standard for asbestos, known as the Maximum Contaminant Level (“MCL”), was exceeded periodically at select locations in Fleetwood Creek Pond, Carney Creek, and Rainy Creek, but the MCL was not exceeded in any of the Kootenai River surface water samples. [Exhibit 14, at p. 215-16] A risk assessment placed the exceedances in context of whether they pose a risk, finding that they did not. The surface water data showed that it met EPA’s acceptable risk range, even assuming that a person would drink 2.5 L of water from these creeks each day, though EPA also noted “that the streams and ponds of the lower Rainy Creek drainage are unlikely to be used for drinking water on a regular basis.” [Exhibit 18, at Site Wide HHRA, Appendix A-4.] The RI Report also noted that groundwater has not been significantly impacted by either non-asbestos constituents or by asbestos from previous mining activities or existing mine wastes. [Exhibit 14, at p. 216.]

25. Following submission of the Final RI Report for Operable Unit 3 on December 2, 2016, supplemental studies were performed. The results of these studies were compiled into two separate RI Report Addenda: the 2016 Addendum and the 2017 Addendum. After several revisions the most recent Final 2016 RI Addendum is dated September 2018, and the most recent Final 2017 RI Addendum is dated October 2018. These supplemental studies addressed, variously, for example, certain tree bark and forest duff sampling; inner wood sampling; woodstove ash and hooking/skidding activity-based sampling; treatability studies; and wetlands delineation. Other data reports issued after the Final RI Report submission included the OU3 Data Summary Report: 2007-2015 Revision 5 in August 2016 and the Wetlands Delineation Report issued in August 2017.

26. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.



Keith N. Cole
Senior Vice President Government Relations
and Environment, Health, and Safety
W. R. Grace & Co.

SWORN AND SUBSCRIBED before me,
this 23rd day of August 2019

Diane Z. Borowy

Notary Public

My Commission Expires: September 18, 2020

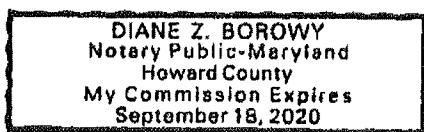


EXHIBIT LIST

The below exhibits referenced in the attached Declaration of Keith N. Cole are contained in the *Appendix Of Exhibits To Reply In Support Of The Reorganized Debtor's Claim Objection Requesting Partial Allowance And Partial Disallowance Of MDEQ Prepetition Claim (Substantive Objection)*.

In addition, full copies of the reports and documents created pursuant to CERCLA and referenced in the Declaration of Keith N. Cole are availableⁱ at the following website and incorporated herein:

<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.docdata&id=0801744#SC>

Exhibit	Title
Exhibit 1	January 31, 1972 Development Permit 00001
Exhibit 2	January 31, 1972 Operating Permit 00010
Exhibit 3	November 3, 1971 W.R. Grace Libby Montana Reclamation Plan (Approved January 27, 1972)
Exhibit 4	May 15, 1986 Letter, Department Of State Lands To W.R. Grace
Exhibit 5	October 1993 Article, The Pick & Shovel Montana Mining Association
Exhibit 6	July 14, 1992 Montana Internal Memorandum re W.R. Grace Closure Plan Environmental Assessment
Exhibit 7	Water Quality Data Report No. 2 (of 6)
Exhibit 8	Water Quality Data Report No. 6 (of 6)
Exhibit 9	August 31, 1994 Bond Release Finding, Montana Department of State Lands
Exhibit 10	September 13, 1994 Montana Memo Re Recommendation For Partial Bond Release at W.R. Grace
Exhibit 11	June 10, 1999 MDEQ Field Inspection Report
Exhibit 12	April 3, 2019 KDID Operation Permit Approval
Exhibit 13	Libby Figure 1 OU3 and KDC Boundaries (August 22, 2019)
Exhibit 14	Remedial Investigation Report (Excluding Tables, Figures & Appendices) (November 2016)

Exhibit	Title
Exhibit 15	Non-Asbestos Human Health Risk Assessment (HHRA) (Excerpt) (January 2013)
Exhibit 16	Baseline Ecological Risk Assessment for Non-Asbestos Contaminants (Excerpt) (April 2013)
Exhibit 17	Site-wide Baseline Ecological Risk Assessment for Asbestos (Excerpt) (December 2014)
Exhibit 18	Site Wide Human Health Risk Assessment (HHRA) for Asbestos (Excerpt) (November 20, 2015)
Exhibit 19	Libby Site-wide Human Health Risk Assessment (HHRA) Addendum for Asbestos (June 12, 2018)

ⁱ Exhibit 19 is not presently posted at the referenced website, but is provided in full in the *Appendix*.